

**Remarks**

In the Office Communication dated April 28, 2009, the Examiner asserts, "The reply filed on 01/12/2009...does not specifically point out how the language of the claims patentably distinguish them from the references." Without admitting to this assertion, Applicants provide the following remarks. For the sake of completeness, this Response sets out the pending claims above, as amended by the Response filed on January 12, 2009. Applicants respectfully request reconsideration and allowance of all pending claims.

**Claim Rejections -- 35 U.S.C. § 112**

In the Office Action dated July 11, 2008 ("*Office Action*"), the Examiner rejects Claims 28-29 under 35 U.S.C. § 112, second paragraph, and asserts that these claims are indefinite. Without admitting to this assertion, Applicants have made clarifying amendments to independent Claim 28 to expedite issuance of a patent from this Application. Dependent Claim 29 depends on independent Claim 28.

In the *Office Action*, the Examiner asks, "In line 7 six motherboards are introduced and then in line 8 'the second motherboard' is referenced. Which motherboard of the six is being referenced?" *Office Action*, p. 2. Applicants respectfully submit that each one of the *six second motherboards* comprises *at least two second processors integrated onto* it and *a second switch integrated onto* it, as independent Claim 28 recites. Similarly, each one of the *five third motherboards* comprises *at least two third processors integrated onto* it and *a third switch integrated onto* it, as independent Claim 28 recites.

Applicants respectfully submit that Claims 28-29, as amended, comply with the second paragraph of 35 U.S.C. § 112. Accordingly, Applicants respectfully request reconsideration and allowance of Claims 28-29.

**Claim Rejections -- 35 U.S.C. § 103**

In the *Office Action*, the Examiner rejects Claims 1-6, 8-14, 21-26, and 30-32 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Publication No. 2001/0049740 by Karpoff ("*Karpoff*"). The *Office Action* rejects Claims 7, 15-20, 27, and 33 under 35 U.S.C. § 103(a) as being unpatentable over *Karpoff* in view of U.S. Patent No. 6,167,502 issued to Pechanek, et al. ("*Pechanek*"). Applicant traverses the rejections and respectfully requests reconsideration and allowance of the pending claims.

***Independent Claim 28***

The cited references fail to support the rejection of amended Claim 28. To support a *prima facie* obviousness rejection, the cited references must disclose or suggest all of the claim limitations. M.P.E.P. § 2143.03. In the present case, the cited references fail to teach, suggest, or disclose each element of amended Claim 28. For example, the cited references fail to teach, suggest, or disclose “the first processors operable to communicate with particular third processors on a particular third motherboard via the first switch, a particular second switch on a particular second motherboard between the first motherboard and the particular third motherboard, and the third switch on the particular third motherboard” as recited in amended Claim 28.

The cited portions of *Karpoff* generally disclose an InfiniBand server architecture that includes central processing units (CPUs) inside a server boundary connected to a switch outside the server boundary. *Karpoff*, ¶¶ 0085, 0089; Fig. 4A. The cited portions of *Karpoff* fail to teach, suggest, or disclose a “first motherboard,” a “second motherboard,” or a “third motherboard” as recited in amended Claim 28. In addition, the cited portions of *Karpoff* fail to teach, suggest, or disclose a “first switch integrated onto the first motherboard,” a “second switch integrated onto the second motherboard,” a “third switch integrated onto the third motherboard,” or “at least two third processors integrated onto the third motherboard” as recited in amended Claim 28. Indeed, the *Office Action* admits that *Karpoff* fails to teach “a motherboard, the switch integrated on the motherboard, and each processor integrated on the motherboard.” *Office Action*, p. 3.

The *Office Action* attempts to overcome the deficiency of *Karpoff* by asserting that “integrating all of the elements onto a motherboard is well known.” *Office Action*, p. 3. The *Office Action* has not cited any evidence to support this assertion. Accordingly, Applicants traverse this assertion. Even if this assertion were true (which Applicants do not admit), the *Office Action* fails to support the rejection. In other words, even if integrating a processor or switch on a motherboard were well known (which Applicants do not admit), the proposed modification of *Karpoff* does not teach, suggest, or disclose the arrangement of elements recited in amended Claim 28. For example, the proposed modification of *Karpoff* fails to teach, suggest, or disclose “the first processors” integrated onto the first motherboard being “operable to communicate with particular third processors on a particular third motherboard via the first switch” integrated onto the first motherboard, as recited in amended Claim 28. In

addition, the proposed modification of *Karpoff* fails to teach, suggest, or disclose “a particular second switch on a particular second motherboard between the first motherboard and the particular third motherboard” as recited in amended Claim 28. Therefore, the proposed modification of *Karpoff* fails to teach, suggest, or disclose “the first processors operable to communicate with particular third processors on a particular third motherboard via the first switch, a particular second switch on a particular second motherboard between the first motherboard and the particular third motherboard, and the third switch on the particular third motherboard without communicating via either second processor on the particular second motherboard” as recited in amended Claim 28.

The cited portion of *Pechanek* fails to cure the deficiency of *Karpoff* discussed above. The cited portion of *Pechanek* generally discloses a manifold array topology associated with processing elements. *Pechanek*, col. 15, ll. 31-40. There is nothing in the cited portion of *Pechanek* that teaches, suggests, or discloses “the first processors operable to communicate with particular third processors on a particular third motherboard via the first switch, a particular second switch on a particular second motherboard between the first motherboard and the particular third motherboard, and the third switch on the particular third motherboard without communicating via either second processor on the particular second motherboard” as recited in amended Claim 28. Therefore, the cited references, alone or in combination, fail to teach, suggest, or disclose each element of amended Claim 28. For at least this reason, Applicants respectfully request reconsideration and allowance of amended Claim 28 and its dependent claims.

### ***Independent Claims 1, 9, and 21***

Although Applicants do not necessarily agree with the Examiner, to expedite issuance of a patent from this Application, Applicants have canceled independent Claim 1. Independent Claims 9 and 21, as amended, recite elements that are analogous to the elements of amended Claim 28 discussed above. Accordingly, for reasons analogous to those discussed above with respect to amended Claim 28, Applicants respectfully request reconsideration and allowance of amended Claims 9 and 21 and their respective dependent claims.

**Conclusion**

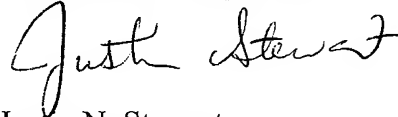
Applicants have made an earnest attempt to place this case in condition for allowance. For the foregoing reasons, and for other reasons clearly apparent, Applicants respectfully request full allowance of all pending claims.

If the Examiner feels that a telephone conference would advance prosecution of this Application in any manner, the Examiner is invited to contact Justin N. Stewart, Attorney for Applicants, at the Examiner's convenience at (214) 953-6755.

Although Applicants believe that no fees are due, the Commissioner is hereby authorized to charge any fees or to credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P..

Respectfully submitted,

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Date: May 28, 2009

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